1999 Utah Crash Summary

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Introduction

The Utah Crash Summary is produced annually, and identifies and describes the trends and effects of traffic crashes in Utah. The statistics within the Utah Crash Summary describe factors that contribute to the occurrence of crashes, and crash-related injuries and fatalities. This report is designed to heighten awareness about traffic safety by allowing safety program specialists and public health personnel to identify areas where education or programs may be focused in an effort to reduce traffic-related injuries and fatalities.

The data for this summary is derived from Utah crash reports. These reported are completed by law enforcement officers throughout the state who collect data from crash scenes on public roadways. Information is collected when a crash involves injuries or fatalities, when the jurisdiction in which the crash occurs requires it, or when the responding officer determines that a report is warranted.

Crash reports are forwarded to the Utah Department of Transportation (UDOT) for central collection. UDOT reviews the crash report forms and enters the data into a database called the Crash Analysis Reporting System (CARS). Beginning in 1997, all private property crashes were excluded from CARS. Since private property crashes accounted for approximately 10% of crashes in previous years, the decrease in crashes since 1997 is due in part to the exclusion of private property crashes. Additional information is collected on fatal crashes and compiled into a separate database, the Fatality Analysis Reporting System (FARS). This database was used for the reporting of alcohol and other drug-related fatal crashes and fatalities.

This report was prepared by the Utah Crash Outcome Data Evaluation System (CODES) project located at the Intermountain Injury Control Research Center, University of Utah School of Medicine. For more information, please contact:

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This crash summary is available on the internet at http://codes.med.utah.edu/UtahCrash1999

Definitions

Alcohol and Other Drug-Related Crash - A crash in which the investigating officer cited a driver for "driving under the influence" (DUI) or coded a contributing factor of "DUI", "had been drinking" or "under the influence of drugs". Since breath test or blood test results may not always be used to determine alcohol and other drug content, these crashes may be underestimated.

Alcohol and Other Drug-Related Injury Crash - A non-fatal crash in which one or more persons are injured and in which the investigating officer cited a driver for "driving under the influence" (DUI), or coded a contributing factor of "DUI", "had been drinking" or "under the influence of drugs". Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these injury crashes may be underestimated.

Alcohol and Other Drug-Related Fatal Crash - A crash resulting in one or more deaths and in which the drug / alcohol test was positive for any driver, pedestrian, or bicyclist involved in the crash. Alcohol and other drug-related fatal crash information is obtained as part of the FARS database.

Alcohol and Other Drug-Related Injury - A non-fatal injury resulting from an alcohol and other drug-related crash. Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these injuries may be underestimated.

Alcohol and Other Drug-Related Fatality - A death resulting from an alcohol and other drug-related crash. Since breath test or blood test results may not always be used to determine alcohol and other drug-related crashes, these fatalities may be underestimated.

Crash Participant - A person who is involved in a crash, including motor vehicle occupants, pedestrians and bicyclists.

Contributing Factor - The circumstances reported by the investigating officer surrounding a crash that contributed to the crash or the crash severity. Examples are "speed too fast", "fatigue" and "had been drinking".

Fatal Crash - A motor vehicle crash on public roadways resulting in one or more deaths. The death must occur within 30 days of the crash.

Injury Crash - A crash in which one or more persons sustained a possible injury, probable injury, or an incapacitating injury as recorded by the investigating officer.

Large Truck Crash - A crash involving one or more vehicles of the following type: (1) a 2-axel, 6-tire single unit truck or van, (2) a 3 or more axle single unit truck, (3) a single unit truck with one or more trailers, (4) a bobtail (power unit only), (5) a tractor with one or more trailers, (6) a concrete mixer, (7) a garbage/ dump truck, (8) an auto transporter, (9) a flatbed truck, and (10) a cargo tank.

Million Vehicle Miles Traveled - The number of miles traveled in a year for a given area, reported in millions. This is calculated by the Utah Department of Transportation.

Motorcycle Crash - A crash involving one or more motorcycles or mopeds.

Motor Vehicle Crash - A crash that involves a motor vehicle on public roadways.

Out of State Driver - A driver licensed from a state other than Utah who is involved in a crash. These drivers may reside in the state of Utah, but have not yet applied for a Utah driver's license.

Seatbelt Use - Seatbelt use is reported for occupants in a passenger car, a light truck or van. Occupants are coded as wearing a seatbelt if they reported using a shoulder/lap belt, lap belt or a child safety seat (occupants using only a shoulder strap were reported to be unbelted). In the majority of cases, seatbelt use as recorded by the investigating officer is self-reported by the crash occupant. It is possible that crash occupants may report using a seatbelt when they were not in order to avoid a citation or fine. In the case of fatal or severe injury crashes the officer will determine the seatbelt use.

School Bus Crash - A crash involving one or more school buses.

Speed-Related Crash - A crash where the investigating officer cites one or more drivers for "speeding", or codes a contributing factor of "speed too fast".

Teenage Driver - A 15 to 19 year old driver.

Teenage Driver Crash - A crash involving a teenage driver.

Teenage Driver Injury Crash - An injury crash involving a teenage driver.

Teenage Driver Fatal Crash - A fatal crash involving a teenage driver.

Violation - The traffic violation that a driver was cited for at the scene of the crash. These include both moving and non-moving violations.

Executive Summary

Death and disability associated with motor vehicle crashes continues to be a problem in the United States, as well as in the state of Utah. Great strides have been made to reduce the motor vehicle crash rate in Utah, and since 1969, the injury and fatal crash rates have steadily declined. In fact, the 1999 crash rate of 241.5 per 100 million vehicle miles traveled is a 5% decrease from the 1998 rate, and is the lowest crash rate in 30 years. This reduction can be attributed to local and statewide traffic safety programs that have increased awareness of traffic safety issues, initiated successful legislation mandating seatbelt use and graduated driver licensure, and increased DUI legislation and enforcement. Despite this progress, motor vehicle crashes continue to take their toll. In Utah, a crash occurs every 10 minutes, a person is injured in a crash every 27 minutes, and a person dies every day from a motor vehicle crash.

In 1999, there were 52,802 crashes in Utah accounting for 29,959 injured persons and 360 fatalities. Overall, crash participants were male, and in the 15 to 24 year age group. Most crashes occurred in urban areas; however, rural crashes were 5 times more likely to result in a fatality than crashes occurring in urban areas. Increased speeds and longer response time for emergency medical services in the rural areas may account for the rural/urban difference in fatal crash rates. Rear-end collisions were the leading collision type, but head-on collisions and single vehicle rollovers were each 6 times more likely to result in a fatality than other collisions. While passenger cars accounted for the majority of vehicles involved in Utah crashes, motorcycle- as well as large/semi truck-crashes were more likely to be fatal than crashes involving other vehicles.

Pedestrians, bicyclists, and motorcyclists involved in a motor vehicle crash are at high risk from suffering injury or death. In 1999, 96.1% of pedestrians, 91.7% of bicyclists, and 89.6% of motorcyclists involved in a motor vehicle crash experienced an injury or death compared to 21.7% of all motor vehicle crash participants. Pedestrians, bicyclists, and motorcyclists have little or no physical barrier between themselves and a motor vehicle or roadway, thus resulting in the high injury and death rate. As with seatbelts, helmets have proven to reduce severe injury and death for bicyclists and motorcyclists. Unfortunately, only 29.6% of motorcyclists involved in a crash were reported to be wearing a helmet.

Teenage drivers are another group that are of concern in Utah because of their high crash rates. Every 31 minutes, a crash occurs in Utah that involves a teenage driver. In 1999, approximately one-third of total crashes involved teenage drivers. Lack of driving experience may contribute to the higher crash rates for teenage drivers. A graduated driver licensing law was passed in Utah in 1998 to help address some of these concerns. The law requires teenage drivers to gain more supervised driving experience before receiving their driver license, and places restrictions on the time of day teenage drivers are allowed to drive. The number of passengers in a teenage driver's car is also of concern. Crashes where the teenage driven vehicle contained four or more occupants were twice as likely to be fatal than crashes involving teenage driven vehicles with fewer occupants. Local traffic safety entities are focusing current legislative efforts on creating a more comprehensive graduated driver licensing law by adding a passenger limitation clause.

Speeding and impaired driving are contributing factors that led to severe injury or death in motor vehicle crashes. In 1999, there were over 6,580 speed-related crashes resulting in 92 fatalities. The majority of the speed-related fatalities occurred on highways; however, speed-related injury crashes and fatal crashes were more likely to occur on a municipal roadway. In 1999, 2,045 crashes were attributed to alcohol and other drug involvement resulting in 72 fatalities. This was a 46.9% increase in alcohol and other drug-related crash fatalities from 1998. While alcohol and drug-related crashes are of great concern nationwide, speeding appears to be the leading factor associated with crash fatalities and may warrant increased attention in Utah.

Seatbelts have been shown to save lives and decrease the severity of injuries in motor vehicle crashes. In Utah, unbelted occupants were 14 times more likely to sustain a fatal injury than belted occupants. Overall, 90.4% of the occupants involved in a crash in 1999 reported using a seatbelt, but seatbelt use rates varied by age and type of crash. Children under the age of 5 years had the highest percentage of seatbelt use (96.0%), while those aged 15 to 19 years experienced the lowest percentage of use (85.8%). Unfortunately, the rate for seatbelt use for fatalities was much lower; only 38.7% of the occupants who died in a crash were reported as wearing a seatbelt. In addition, the majority of ejected occupants (who often suffer severe injury or death) were not wearing a seatbelt. Utah law requires all children under the age of 19 years to be properly restrained in a motor vehicle. Children under the age of 4 years must ride in an approved child safety seat, and children aged 4 to 19 years must ride in an approved child safety seat or seatbelt.

Motor vehicle crashes in Utah continue to be a leading cause of death and disability in the state. Of particular concern are speed-related crashes, crashes involving pedestrians and motorcyclists, and teenage driver crashes. Many people have put for great effort in addressing these and other traffic-safety-related issues through local programs as well as legislation. However, an overwhelming number of people are affected by motor vehicle crashes, and traffic safety needs to remain a top priority in Utah.

1999 Crash Synopsis

Crashes, Injury Crashes and Fatal Crashes

- 52,802 motor vehicle crashes were reported, a 3% decrease from 1998
- Over 19,500 injury crashes in 1999 were reported, a 12% decrease from 1997
- 318 fatal motor vehicle crashes were reported, a 3% increase from 1998
- Sundays had nearly double the odds for a fatal crash than any other day of the week
- Memorial Day had the highest fatal crash rate per day among holidays
- Head-on collisions were 6 times more likely to be fatal than other collision types
- Drivers cited for driving under the influence were 7 times more likely to be involved in a fatal crash than drivers cited for other violations
- Drivers cited for speeding were 2 times more likely to be involved in a fatal crash than drivers cited for other violations
- Drivers between the age of 15 and 19 years old had the highest crash, injury crash, and fatal crash rates per licensed driver
- Out of state drivers were involved in 9% of crashes and 23% of fatal crashes

Crash Participants, Injured Persons and Fatalities

- 360 crash related fatalities occurred, a 4% increase from 1998
- For every 83 persons injured in a motor vehicle crash, one person was killed
- Front seat passengers (excluding drivers) were 1.6 times more likely than back seat passengers to sustain a fatal injury
- Crash participants over the age of 65 years were three times more likely to be killed than all other age groups

Pedestrian Crashes

- 818 pedestrians were involved in pedestrian-motor vehicle crashes
- 38 pedestrians were killed, a 13% decrease from 1998
- 37% of the fatal pedestrian crashes occurred between Memorial Day and Labor Day
- 47% of the pedestrians were under the age of 20 years
- 43% of the drivers involved in pedestrian crashes were aged 15 to 29 years

Bicyclist-Motor Vehicle Crashes

- 855 bicyclists were involved in motor vehicle crashes, a 2% increase from 1998
- 7 bicyclist were killed
- 31% of the motor vehicle drivers involved in bicyclist-motor vehicle crashes were 15 to 24 years of age

Motorcycle Crashes

- There were 678 crashes that involved motorcycles, a 13% increase from 1998
- 24 motorcycle crashes were fatal
- 87% of the motorcyclists in crashes were male
- Motorcycle drivers accounted for 87% of motorcyclist fatalities
- 30% of motorcyclists involved in crashes were wearing a helmet

Teenage Driver Crashes

- 16,759 crashes and 72 fatal crashes involved a teenage driver
- Nearly 47% of all teenage drivers involved in a crash received a citation for a violation
- Of the 72 teenager driver fatal crashes 7 involved alcohol or other drugs
- Teenage driver crashes that the teenage driven vehicles had 4 or more occupants were 2 times more likely to be fatal than crashes involving teenage driven vehicles with fewer occupants

Alcohol and Other Drug-Related Crashes

- 2,045 (4%) crashes and 66 (21%) fatal crashes involved alcohol or other drugs
- 72 fatalities were a result of alcohol and other drug-related crashes, a 32% increase from 1998
- Male drivers were involved in over three-quarters (80%) of alcohol and other drug-related crashes
- 18% of the impaired drivers were under the age of 21 years
- 83% of drunk drivers involved in fatal crashes had a blood alcohol level above the legal limit of 0.08

Speed-Related Crashes

- 6,580 (12%) crashes and 92 (29%) fatal crashes were speed-related
- 95 person were killed in speed-related crashes
- The highest percentage of drivers involved in speed-related crashes were aged 15 to 19 years for both males and females

Occupant Protection

- 90% of all crash participants, 81% of injured crash participants and 39% of the fatalities were reported as using a seatbelt
- Unbelted occupants were 14 times more likely to be killed than belted occupants
- 91% of the ejected passengers were not wearing a seatbelt
- Children under the age of 2 years were 5 times more likely to be in a child safety seat than children between the ages of 2 to 4 years
- Children in the back seat were 3 times more likely to be in a child safety seat than children in the front seat

1999 Utah Crash Clock

- One crash occurs every 10 minutes
- One person is injured in a crash every 27 minutes
- One person dies in a crash every 24 hours
- One pedestrian is in a crash every 11 hours
- One pedestrian fatality occurs every 8 days
- One bicyclist is in a crash every 10 hours
- One motorcyclist is in a crash every 11 hours
- One motorcycle fatality occurs every 15 days
- One teenage driver crash occurs every 31 minutes
- One teenage driver fatal crash occurs every 5 days
- One alcohol and other drug-related crash occurs every 4 hours
- One speed-related crash occurs every 45 minutes
- One unbelted occupant dies every 2 ½ days